



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,229	12/14/2000	Jin-Hong Kim	850795.90026	6287

7590

04/27/2004

STEVEN J. WIETRZNY
Quarles and Brady LLP
411 East Wisconsin Avenue
MILWAUKEE, WI 53202

EXAMINER

PEREZ GUTIERREZ, RAFAEL

ART UNIT

PAPER NUMBER

2686

DATE MAILED: 04/27/2004

8.

Please find below and/or attached an Office communication concerning this application or proceeding.

7

7

Office Action Summary

Application No.

09/737,229

Applicant(s)

Kim

Examiner

Rafael Perez-Gutierrez

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2686

DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on February 9, 2004. **Claims 3-5** are now pending in the present application. **This Action is made FINAL.**

Drawings

2. The formal drawings received on February 9, 2004 have been approved by the Examiner.

Specification

3. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless -- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2686

Claims 3 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by **Houde et al. (U.S. Patent # 5,978,678)**, as applied in the first Office Action.

Consider **claim 3**, Houde et al. clearly show and disclose a method of delivering an incoming call (reads on providing a wireless communication service) to an international roaming cellular mobile station 16(1) (abstract, figure 1, column 1 lines 18-20, and column 5 lines 1-5), the method comprising the steps of:

a) registering the international roaming cellular mobile station 16(1) at a switching node 34 (read as the mobile switching center (MSC)) (abstract, figure 1, column 2 lines 22-32, column 4 lines 28-67, and column 6 lines 7-12);

b) determining whether a routing request signal (message) 206 for the international roaming cellular mobile station 16(1) is for an international call when the routing request signal (message) 206 is received at the switching node 34 (MSC) (figures 1 and 3, column 2 lines 33-40, column 5 lines 22-43, and column 6 lines 24-36); and

c) generating an international routing number of the international roaming cellular mobile station 16(1) when the routing request signal (message) 206 is for an international call and sending the international routing number (abstract, figures 1 and 3, column 2 lines 37-55, column 5 line 29 - column 6 line 4, and column 6 lines 26-53).

Consider **claim 5**, and **as applied to claim 3 above**, Houde et al. further disclose that said international routing number includes a temporary local directory number, a country code, and a carrier code (read as the system operator code) (figure 3, column 2 lines 37-55, column 5 line 29 - column 6 line 4, and column 6 lines 26-53).

Art Unit: 2686

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Houde et al. (U.S. Patent # 5,978,678)** in view of **Koster (U.S. Patent # 6,259,914 B1)**, both as applied in the first Office Action.

Consider **claim 4**, and **as applied to claim 3 above**, Houde et al. clearly show and disclose the claimed method except the steps of:

d) assigning a virtual origination number to the international roaming cellular mobile station 16(1) in the switching node 34 (MSC) when a call origination request from the international roaming cellular mobile station 16(1) is received at the switching node 34 (MSC);
and

Art Unit: 2686

e) sending a call connect message having the virtual origination number instead of a calling party number.

Koster clearly shows and discloses a method for implementing and allowing international wireless roaming (read as providing a wireless communication service) to an international roaming mobile station 100 (abstract, figure 1, and column 1 lines 7-10) comprising, among other steps, the steps of:

assigning a mobile directory number (read as the virtual origination number) to the international roaming mobile station 100 in the mobile switching center (MSC) 110 when a call origination request from the international roaming mobile station 100 is received at the MSC 110 (abstract, figure 1, column 3 lines 42-53, column 4 lines 3-14, and column 6 lines 8-17); and

sending a call setup request 510 (read as the call connect message) having the mobile directory number (read as the virtual origination number) instead of a calling party number (column 6 lines 30-46).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the steps in the calling method taught by Koster into the calling method taught by Houde et al. in order to allow the international roaming cellular mobile station subscriber to also originate calls in the visiting country without regard to the numbering scheme plan in said visiting country by assigning a mobile directory number (virtual origination number) that is, for example, a valid North American Numbering Plan (NANP) formatted number. By assigning such number, any call originated by a mobile station subscriber, of a cellular system located in, for example, Canada or the United States, in said visiting country

Art Unit: 2686

would have been treated by any PSTN switch as a normal call (Koster; abstract and column 3 lines 53-55), thereby allowing the system to be configured easily and facilitate service to international roamers.

Response to Arguments

7. Applicant's arguments filed on February 9, 2004 have been fully considered but they are not persuasive.

In the present application, Applicant argues, on page 10 of the remarks, that steps b) and c) are performed at the MSC and that Houde et al. fail to perform said steps at the MSC.

The Examiner respectfully disagrees with Applicant's argument because of the following reasons. Regarding step b): First, step b) (i.e., determining) can be performed by any other element besides the MSC. The Examiner wants the Applicant to note that the determining part occurs when the routing request message is received at the MSC. This recitation does not mean that the MSC is performing the determination. The current claim language is broad enough that the determination could have been made by other element(s) in the system. Second, even if the MSC performs step b) as argued by the Applicant, Houde et al. clearly disclose that the switching node 34 (MSC) determines whether a routing request signal (message) 206 for the international roaming cellular mobile station 16(1) is for an international call when the routing request signal (message) 206 is received at the switching node 34 (MSC) (figure 3 steps 206, 208, column 2 lines 33-40, column 5 lines 22-35, and column 6 lines 24-29).

Art Unit: 2686

Regarding step c), it is noted that the features upon which Applicant relies (i.e., step c) being performed at the MSC) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Since the current claim language in step c) is silent as to which element performs the step, Houde et al. clearly meet the claimed language in step c).

Additionally, Applicant argues, on page 10 of the remarks, that the MDN of Koster is assigned by the domestic (or IRS) HLR instead of the MSC.

The Examiner respectfully disagrees with Applicant's argument because, as the claim language recites, Koster clearly discloses that the MDN is assigned in the MSC when a call origination request from the international roaming mobile station 100 is received at the MSC (emphasis added) (column 3 lines 50-53, column 4 lines 7-14). It is clear from Koster's teachings that the MSC assigns and uses the MDN for signaling purposes when a call origination request is received at the MSC.

Therefore, in view of the reasons explained in detail above and having addressed each of Applicant's arguments, the previous rejection is maintained and made FINAL by the Examiner.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

Art Unit: 2686

Thibert et al. (U.S. Patent # 6,490,449 B1) disclose a system and method of automatic roaming analysis (ARA) for dialing abbreviated numbers in a wireless intelligent network;

Chambers et al. (U.S. Patent # 6,587,688 B1) disclose providing telephone number data for international cellular roamer service;

Adamany et al. (U.S. Patent # 6,615,041 B2) disclose methods and systems for providing information to a home system regarding a wireless unit roaming in a visited system.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any response to this Office Action should be **faxed to (703) 872-9306 or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Art Unit: 2686

Hand-delivered responses should be brought to

Crystal Park II
2021 Crystal Drive
Arlington, VA 22202
Sixth Floor (Receptionist)

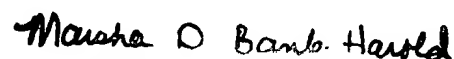
11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rafael Perez-Gutierrez whose telephone number is (703) 308-8996. The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700 or call customer service at (703) 306-0377.


Rafael Perez-Gutierrez
R.P.G./rpg **RAFAEL PEREZ-GUTIERREZ**
PATENT EXAMINER

April 20, 2004


MARSHA D. BANKS-HAROLD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600